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| 21186 7590 02/06/2007 SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402 | | | EXAMINER ABEL JALIL, NEVEEN | |
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| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|-------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 10/047,446 | Applicant(s) COPPERMAN ET AL. | |
| | Examiner Neveen Abel-Jalil | Art Unit 2165 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/24/06 & 11/20/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-11,25-31,36-42 and 62-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11, 25-31, 36-42, and 62-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>7/31/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. The Amendments filed on July 24, 2006 and November 20, 2006 has been received and entered. Claims 2, 12-24, 32-35, and 43-61 have been cancelled. Claims 62-64 have been newly added. Therefore, claims 1, 3-11, 25-31, 36-42, and 62-64 are now pending.
2. Applicant's Amendment has overcome the rejection under 35 USC 101, and some of the previous claim objections.

Claim Objections

3. Claim 1 is objected to because of the following informalities:

Claim 1, line 4 recite "the user" lacks antecedent basis. Is this meant to be a reference to the "end user" or a different "user"? Correction is required.

Claims 11, 31, and 42 are objected to because of the following informalities:

Both claims recite the intended use language of "for performing" which does not actually have to take place. Claims should be amended to recite more definite and direct language such as "to perform". Appropriate correction is required.

Claim 63, line 2 contains multiple instances of "that that" which is typo needing correction. Appropriate correction is required.

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Claims 63 and 64 both re-introduce “a concept” although previously introduced in preceding claims. It’s not clear if it’s a new instance of “concept” or a reference to the original concept thus lacks antecedent basis (should be preceded with “said” or “the”).

Claim 64 recite “a previous” and “an indication” again although previously introduced in preceding claims. It’s not clear if it’s a new instance of “concept” or a reference to the original concept thus lacks antecedent basis (should be preceded with “said” or “the”).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3-11, 25-28, 31, 40, 42, and 62-64 are rejected under 35 U.S.C. 102(e) as being anticipated by Foulger et al. (U.S. Patent No. 6,578,022 B1).

As to claim 1, Foulger et al. discloses a method of steering an end-user to a document needed by the end-user, the method including:

receiving from the end-user a user query including language (See Figure 4A, 412, receiving search query);

using at least a portion of the user query to search for and retrieve a set of one or more documents needed by the end user (See column 21, lines 9-17, and see column 23, lines 40-45);

obtaining, using the retrieved set of one or more documents, at least one matched concept that matches a corresponding concept feature that appears in at least one document in the set of one or more documents (See Figure 6, and Figure 10B, also see column 22, lines 56-60, and see column 23, lines 10-17); and

presenting to the end-user at least one indication of the at least one matched concept and at least one document associated with the at least one matched concept (See column 21, lines 9-11).

As to claim 3, Foulger et al. discloses further including:

presenting to the user at least one indication of at least one related concept to the at least one matched concept (See column 4, lines 5-12, wherein “related concept” reads on “suggestion space” tied to the matched concept);

receiving from the user a selection of at least one related concept (See column 3, lines 29-35, wherein “related concept” is found from the “suggested space”); and

presenting to the user at least one indication of at least one document associated with the user-selected related concept (See column 3, lines 50-52, wherein “document” reads on “search results” data).

As to claims 4, and 27, Foulger et al. discloses in which the presenting to the user at least one indication of at least one document associated with the user-selected related concept includes

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presenting to the user the at least one indication of the at least one document associated with both the user-selected related concept and the at least one matched concept (See column 4, lines 5-12, wherein “related concept” reads on “suggestion space” tied to the matched concept).

As to claim 5, Foulger et al. discloses further including presenting to the user at least one indication of the at least one matched concept (See column 7, lines 55-60).

As to claim 6, Foulger et al. discloses in which the presenting to the user at least one indication of the at least one matched concept and the presenting to the user at least one related concept to the at least one matched concept (See column 4, lines 5-12) includes presenting to the user a paired indication of:

(1) a matched concept, and (2) a corresponding related concept (See column 7, lines 6-22, also see Figure 4B, flowchart, shows that matched results (base results) can be refined as well as reconcile with suggested “related” results).

As to claim 7, Foulger et al. discloses further including ranking related concepts (See Figure 6, shows related resulted ranked by relevance to original search query).

As to claims 8, and 62, Foulger et al. discloses in which the presenting to the end-user at least one indication of at least one related concept to the at least one matched concept includes presenting to the end-user ranked indications of related concepts (See Figure 6, shows related resulted ranked by relevance to original search query).

As to claims 9, 29, and 63, Foulger et al. discloses in which the ranking related concepts includes ranking using a number of times that the related concept was previously-selected by at least one end-user (See column 7, lines 46-54).

As to claims 10, 30, and 64, Foulger et al. discloses further including promoting a related concept in the ranking when a previous selection by an end-user resulted in an inferred success in returning at least one relevant document (See column 7, lines 41-44).

As to claim 11, Foulger et al. discloses a computer-readable medium for performing the method of claim 1 (See claim 1 rejection above).

As to claim 25, Foulger et al. discloses a method of steering an end-user to a document needed by the end-user, the method including:

receiving from the end-user a user query including language (See Figure 4A, 412, receiving search query);

searching for and retrieving a set of one or more documents by determining whether at least one feature in the user query language substantially matches at least concept feature associated with at least one concept in a plurality of concepts in a knowledge map that are pregroupped into a plurality of groups, each concept including as evidence at least one concept feature (See column 14, lines 46-52, wherein “determining” reads on “return results” based on the search input, and wherein “at least one feature” reads on “parameter”, and wherein “concept”

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reads on “node” node, also see column 10, lines 4-14, and see column 2, lines 38-49, gives an example of feature and concept);

presenting to the end-user, when the at least one feature in the user query language substantially matches the at least one concept feature associated with a concept, wherein the at least one concept feature is obtained from the set of one or more documents, at least one indication of the at least one matched concept and at least one related concept to the at least one matched concept, the at least one related concept determined from a predefined correspondence relationship between the at least one matched concept and the at least one related concept, the indication of the at least one related concept presented as corresponding to the at least one matched concept to which it is related (See column 6, lines 16-29, also see column 22, lines 3-7, also see column 22, lines 43-60); and

presenting to the end-user, when the at least one feature in the user query language substantially matches the at least one concept feature associated with the at least one concept (See column 14, lines 46-52, wherein “determining” reads on “return results” based on the search input, and wherein “at least one feature” reads on “parameter”, and wherein “concept” reads on “node” node, also see column 10, lines 4-14, and see column 2, lines 38-49, gives an example of feature and concept), at least one indication of the at least one matched concept and at least one document associated with the at least one matched concept, the at least one document drawn from a plurality of documents that are respectively linked to one or more of the concepts in the knowledge map (See column 21, lines 9-11, also see column 22, lines 43-54).

As to claim 26, Foulger et al. discloses receiving from the end-user a selection of at least one related concept (See column 8, lines 35-42, and see column 22, lines 36-40; and presenting to the end-user at least one indication of at least one document associated with the at least one end-user-selected related concept (See Figure 6, shows relevance of concepts, also see column 21, lines 9-15, wherein “presenting” reads on “menu” and “submenu” and suggestions being displayed to end-user).

As to claim 28, Foulger et al. discloses including ranking related concepts, and in which the presenting to the end-user at least one indication of at least one related concept to the at least one matched concept includes presenting to the end-user ranked indication of related competes (See Figure 6, shows relevance of concepts, also see column 8, lines 35-42, and see column 22, lines 36-40).

As to claim 31, Foulger et al. discloses a computer-readable medium for performing the method of claim 25 (See claim 25 rejection).

As to claim 36, Foulger et al. discloses a method of steering a user to a document needed by the end-user, the method including:

receiving from the end-user a user query including language (See Figure 4A, 412, receiving search query);

searching and retrieving a set of one or more documents determining whether at least one feature in the user query language substantially matches at least one concept feature associated

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with a concept (See column 114, lines 46-52, wherein “determining” reads on “return results” based on the search input, and wherein “at least one feature” reads on “parameter”, and wherein “concept” reads on “node” node, also see column 10, lines 4-14, and see column 2, lines 38-49, gives an example of feature and concept) in a plurality of concepts in a knowledge map that are pre-grouped into a plurality of primary groups, each concept including as evidence at least one concept feature that is also in at least one document in a plurality of documents that are tagged to one or more of the concepts in the knowledge map (See column 3, lines 27-35, wherein “knowledge map” reads on “taxonomy structure presented to the user of the knowledge base”, also see column 3, lines 61-67, wherein “tagged” reads on linked to suggestions made by the knowledge expert as being related), wherein the at least one concept feature is obtained from the set of one or more documents (See Figure 6, and Figure 10B, also see column 22, lines 56-60, and see column 23, lines 10-17);

presenting to the end-user, when the at least one feature in the user query language substantially matches the at least one concept feature associated with the concept (See column 14, lines 46-52, wherein “determining” reads on “return results” based on the search input, and wherein “at least one feature” reads on “parameter”, and wherein “concept” reads on “node” node, also see column 10, lines 4-14, and see column 2, lines 38-49, gives an example of feature and concept):

at least one indication of the at least one matched concept (See Figure 6, and Figure 10B);

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at least one indication of at least one related concept to the at least one matched concept (See column 3, lines 61-67, wherein “tagged” relationships reads on “suggested” by the knowledge expert as being related, also see column 9, lines 1-9); and

at least one indication of at least one document associated with the at least one matched concept (See Figure 6, shows an indication of relevance of matched concept (i.e. category)).

As to claim 37, Foulger et al. discloses in which the related concept is obtained from a derived group mapping relationships between primary group concept nodes from the same or different primary groups (See column 19, lines 44-51, teaches different groups of related search categories/dimensions, also see column 20, lines 48-49).

As to claim 40, Foulger et al. as modified discloses further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of**:

at least one lexically-similar group, including at least one relationship between lexically similar concepts (See column 20, lines 56-58); and

at least one semantically-similar group, including at least one relationship between semantically similar concepts.

As to claim 42, Foulger et al. as modified discloses a computer-readable medium for performing the method of claim 36 (See claim 36 rejection above).

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 38, 39, and 41 are being rejected under 35 U.S.C.103 (a) as being obvious over Foulger et al. (U.S. Patent No. 6,578,022 B1).

As to claim 38, Foulger et al. teaches the claimed invention except for in which the primary groups or derived groups including an Activities group, a Symptoms group, a Products group, and an Objects group. Specific to the claim language of:

further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of**:

an Activities and Objects group, including at least one relationship between an Activities concept and an Objects concept;

an Activities and Products group, including at least one relationship between an Activities concept and a Products concept;

a Symptoms and Objects group, including at least one relationship between a Symptoms concept and an Objects concept;

a Symptoms and Products group, including at least one relationship between a Symptoms concept and a Products concept; and

a Symptoms and Activities group, including at least one relationship between a Symptoms concept and an Activities concept.

Foulger et al. does not explicitly teach the subject heading for each primary group as listed in the claim (but teaches it to be user defined), however he teaches user assigned primary search groups/dimensions/ categories (See column 19, lines 44-51, teaches different groups of related search categories/dimensions, also see column 20, lines 48-49). More specific to the claim language:

further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of**:

an Activities and Objects group, including at least one relationship between an Activities concept and an Objects concept (See Figure 7B, shows defined primary groups/categories and related sub-groups/categories);

an Activities and Products group, including at least one relationship between an Activities concept and a Products concept;

a Symptoms and Objects group, including at least one relationship between a Symptoms concept and an Objects concept;

a Symptoms and Products group, including at least one relationship between a Symptoms concept and a Products concept; and

a Symptoms and Activities group, including at least one relationship between a Symptoms concept and an Activities concept.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to assign different headings to primary concept groups since it is known in the database art that concept groups are user definable (non-functional descriptive material does

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not add functionality to the claim and any type of content can be stored and defined in a knowledge base).

As to claim 39, is rejected under the same rational as claim 38 wherein Foulger et al. is modified to teach:

further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of**:

an Activities and Activities group, including at least one relationship between different Activities concepts (See Figure 7B, shows defined primary groups/categories and related sub-groups/categories);

an Objects and Objects group, including at least one relationship between different Objects concepts;

a Symptoms and Symptoms group, including at least one relationship between different Symptoms concepts; and

a Products and Products group, including at least one relationship between different Products concepts.

As to claim 41, is rejected under the same rational as claim 38 wherein Foulger et al. is modified to teach:

in which the primary groups consist only of Products, Activities, Symptoms, and Objects groups (See Figure 7B, shows defined primary groups/categories and related sub-

groups/categories).

Response to Arguments

8. Applicant's arguments filed on 7/24/2006 and 11/20/2006 have been fully considered but they are not persuasive.

In response to Applicant's argument that "Foulger et al. does not teach or suggest receiving a query, using the query to retrieve documents, obtaining one or more matched concepts from the retrieved documents, and presenting to the user an indication of a document and matched concept" is acknowledged but not deemed to be persuasive.

The Examiner clearly points out the second and third limitations of Independents claim 1 do not appear to be related. The claim language appears to jump from "using a portion of the user's query" to actually "using the retrieved set of one documents" without any tie-in or explanation on first, acquiring results matching the search query (i.e. set of matched documents), then, somehow "obtaining using those retrieved documents", a matched concept. How are two steps related? How does the "obtaining" take place? How did the "matching" take place? By removing the previously claimed "determining" steps, the claim now lacks interrelational dependency and appears to have missing steps.

The claim as such doesn't specify what "portions" of the query is actually used and thus is interpreted broadly to read on Foulger et al. Figure 10B, icon "search", also see column 13, line 67, wherein "query builder" is taught.

Due to the lack of interrelational dependency between the limitations, or any differentiation between “end-user” and later claimed “user”, then, simply clicking on one or more concepts or moving throughout the taxonomy/knowledge map within the obtained results on the user interface as taught by Foulger et al. column 21, lines 817, and column 22, lines 57-60, reads on the argued limitation.

Simply, showing results to the end user (Foulger et al. column 14, lines 48-52, Figure 10B) reads on the argued limitations since the claim doesn’t explain or suggest how the “matching” takes place and to what effect/what’s included is this “indication” being sought?

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., extracting concepts out of the very retrieved documents that are returned by the search executed using the query) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to Applicant's argument that “Foulger et al. does not teach or suggest ranking related concepts includes ranking using a number of times that the related concept was previously selected by at least one end user as recited in claim 29 or promoting a related concept in the ranking when a previous selection by an end user resulted in an inferred success in returning at least one relevant document as recited in claim 30, in fact the OA failed to address claims 29-30 all together“ is acknowledged but not deemed to be persuasive.

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Indeed claims 29-30 were previously addressed in the non-final office action mailed on 3/20/2006 on page 10, grouped with claims 9 and 10 rejections. Newly added claims 62-64 have also been rejected by grouping them with claims 8-10 (see OA above).

Foulger et al. in column 14, lines 49-52, and column 17, lines 50-56, and column 18, lines 43-48, teach narrowing or expanding suggested search results indicating refinement based on previous selection and re-ranking presented to the user thus reading on the argued limitation.

In column 18, lines 30-39, Foulger et al. teaches the re-ranking is based on number of hits, i.e. inferred success.

In response to Applicant's argument that "Foulger et al. does not teach or suggest the indicated groups i.e. primary groups or derived groups including an Activities group, a Symptoms group, a Products group, and an Objects group" is acknowledged but not deemed to be persuasive.

Again the Examiner emphasizes that Foulger et al. teaches all categories can be user defined and thus customized according to any needed headings. The Applicant in the remarks refers to pages in the specification which is not part of the claims. There's no recitation of "attributes" associated with the categories claimed.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Neveen Abel-Jalil
February 5, 2007